

REMARKS

Claims 2-24 are pending in the present application. Claims 9-24 are withdrawn from consideration. Claims 2-8 are rejected. Reconsideration is respectfully requested in light of the following remarks, which are believed to be fully responsive to the Outstanding Office Action and to render all claims at issue patentably distinct over the cited reference.

Claim Rejections - 35 USC § 103

The Office Action states that the application currently names joint inventors and that Applicant is obligated under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. § 103. As previously stated in response to the first office action, the present application does not currently name joint inventors. Only one inventor is named in the present application, Robert Woolley Brunson.

Claims 2-8 were rejected under 35 U.S.C. § 103 as being patentable over U.S. Patent No. 5,447,035 to Workman et al. The Office Action states that Workman discloses the features including the claimed cryogenic method steps of treating brake components but that Workman does not disclose repeatedly heating to 300°F and cooling to room temperature. Further, the Office Action states that a two step combination and two obvious process steps is unpatentable when each lends properties to the final product known to be produced when the step is practiced alone.

The repeated post-temper steps as claimed in Claim 2 produce unexpected results. After only one post-temper, it has been found that a small amount of ETA carbide growth occurs, and a complete transition of the ETA carbides is desired for adequate stress relief in brake components of a certain material type. Accordingly, repeating the post-temper steps according to the claimed embodiment provides for a more complete transition of the ETA carbides, which was unexpected in the deep cryogenic process according to the claimed invention.

The Office Action further states that with respect to claim 4, the claimed "approximately 100°F reads on ambient temperature. Claim 4 depends from Claim 2 and distinguishes over Workman for at least the reasons stated above in connection with Claim 2. Accordingly, Applicant respectfully requests that the rejection of Claim 4 be withdrawn.

The Office Action states that the limitation in claim 5 reads on the teaching in Workman. Claim 5 depends from Claim 2 and distinguishes over Workman for at least the reasons stated above in connection with Claim 2. Accordingly, Applicant respectfully requests that the rejection of Claim 5 be withdrawn.

With regard to the limitations set forth in claims 6-7, the Office Action states that it is insignificant where or what device is used for heat treatment. Applicant respectfully disagrees since when the component is transported (Claim 7) and at what temperature the brake component is at when transported (Claim 6) are significant parameters of the claimed process.

Additionally, Claims 6-7 depend from Claim 2 and distinguish over Workman for at least the reasons stated above in connection with Claim 2. Accordingly, Applicant respectfully requests that the rejection of Claims 6-7 be withdrawn.

The Office Action also states that with respect to Claim 8, using inert gas in heat treatment chamber to protect heat treating material from oxidizing (*sic*) is contemplated within the ambit of ordinary skill artisan. Contrary to the Examiner's assertion, the Applicant is not using an inert gas to protect the material from oxidizing. Rather, the inert gas is being used to cool the material being treated. Furthermore, Claim 8 depends from Claim 2 and is distinguishable for at least the reasons stated above in connection with Claim 2. Accordingly, Applicant respectfully requests that the rejection of Claim 8 be withdrawn.

In view of the present remarks, Applicant submits that the present application is in condition for allowance. Therefore, Applicant respectfully requests that the Examiner pass the case to issue at his earliest convenience. If it would advance the prosecution of this application, the Examiner is invited to telephone the undersigned

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